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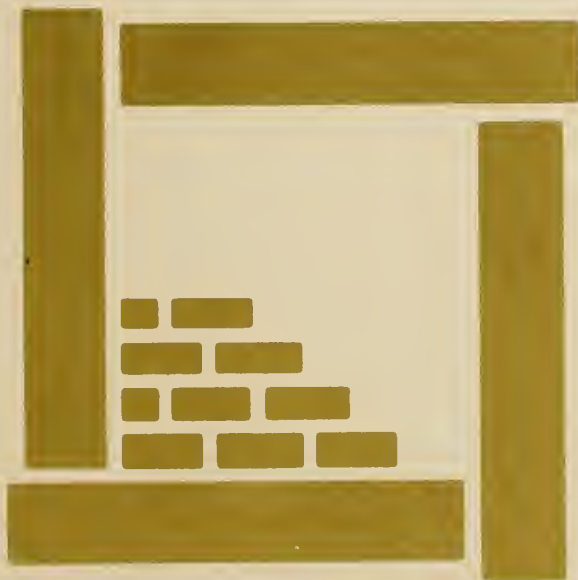
Census of Construction Industries

CC82-I-2

INDUSTRY SERIES

General Contractors— Residential Buildings, Other Than Single- Family Houses

Industry 1522



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The publications
from the 1982 Economic and
Agriculture Censuses are dedicated
to the memory of Shirley Kallek,
Associate Director for Economic Fields.
During her career at the Bureau of the
Census (1955 to 1983), she continually
directed efforts to improve
the timeliness and accuracy of
economic statistics.

1982

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General Contractors— Residential Buildings, Other Than Single- Family Houses

Industry 1522

Issued November 1984



U.S. Department of Commerce
Malcolm Baldrige, Secretary
Clarence J. Brown, Deputy Secretary
Sidney Jones, Under Secretary for
Economic Affairs

BUREAU OF THE CENSUS
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CONSTRUCTION DIVISION

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This report was prepared in the Construction Statistics Division under the general direction of Leonora M. Gross, Chief. Alan I. Blum, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

A. William Visnansky supervised the preparation of this report. Barbara J. Hadden, Edward R. Glover, Otto G. Ricci, Marie Rustin-Sanhueza, and Shirley M. Baker made important contributions in such areas as developing specifications, procedures, and resolving problems.

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ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications¹ (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

METHOD OF ACCOUNTING AND TIME COVERED

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

Contract construction—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

1. **Building construction by general contractors**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
2. **Other construction by general contractors**—Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
3. **Construction by special trade contractors**—Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Construction on their own account, for sale—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

Subdividers and developers, except cemeteries—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

Employer Firms

Developing the sampling frame for employer firms—This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownership of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multi-establishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

Selecting the employer sample—A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

Estimation procedures for 1982 and 1977 data—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for

establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

Nonemployer Firms

General—As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

Qualifications to the nonemployer data—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and

returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

DUPLICATION IN RECEIPTS

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and non-construction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is

defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

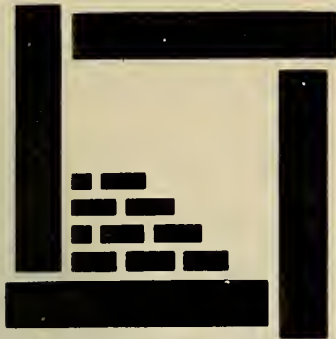
maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- † Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- †† Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- ± Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.



FINAL REPORT
INDUSTRY SERIES

1982 Census of Construction Industries

CC82-I-1 to 28
Changed October 1986

CHANGE SHEET

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series CC82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.



U.S. Department
of Commerce
BUREAU OF
THE CENSUS

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employ- ment size	By receipts size	By type, class, ownership, kind of business, and location of construction ¹	By speciali- zation in types of construction
Assets and depreciation (gross book value):						
Beginning of year—structures, machinery and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—structures, machinery and equipment	3					
Depreciation charges during the year— structures, machinery and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New structures—machinery and equipment	3					
Used structures—machinery and equipment	3					
Communication services, payments for	2					
Employees:						
All employees—average number	1, 2	1	5	6		8
Construction workers—average number	1, 2, 9					
Other employees—March	2					
Employer costs for fringe benefits—legally required and voluntary expenditures	2					
Establishments:						
Number in business at end of year	2					
Number in business during the year	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total	1, 2, 9	1, 9	5	6		
Quarterly	2, 9	9				
Inventories	4					
Materials, components, supplies, and fuels— payments for	1, 2	1	5	6		
Payroll:						
First quarter, all employees	2					
Annual:						
All employees	1, 2	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—payments for	2					
Profile of the industry—selected industry averages	12					
Proprietors and working partners	2					
Ratios, State	13	13				
Receipts:						
All business receipts	2		5	6	11	
Construction receipts, total	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others	2					
Other business receipts and land receipts ²	2					
Net construction receipts	1, 2	1	5	6		8
Value added	1, 2	1	5	6		8
Rental payments:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For structures	2					
Repairs to structures and related facilities	2					
Repairs to machinery and equipment	2					
Storage capacity for fuels ³	2					
Subcontract work to others, payments for	1, 2	1	5	6		8

Note: Data for 1977 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned.

²Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only.

³Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.

General Contractors—Residential Buildings, Other Than Single-Family Houses

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in the construction of apartment buildings, hotels, motels, and dormitories (including new work, additions, alterations, remodeling, and repair). For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.¹

During 1982, there were 7,464 establishments with payroll classified in this industry.² All business receipts of these establishments amounted to \$8.0 billion, of which \$7.8 billion were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$4.3 billion, leaving net construction receipts of about \$3.6 billion. Value added for 1982 was \$2.0 billion. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$1.7 billion for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$67.0 million were also made for selected power, fuels, and lubricants purchased during the year from other companies or received from other establishments of the parent company.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

²Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

Establishments with 10 employees or more, while representing only 18 percent of the total number of employer establishments in this industry, accounted for 82 percent of all business receipts.

Total average employment in the industry showed an increase of 13 percent from 1977 to a total of 63 thousand employees. Total payroll for 1982 amounted to \$1.1 billion. Hours worked by construction workers during the first quarter of 1982 were 20.0 million hours, while hours worked during the third quarter were 20.8 million hours.

Payments of \$201 million for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees—such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 172,000 construction establishments. The estimates for this particular industry are based on a sample of about 5,100 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry, but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1982							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Total construction receipts	Net construction receipts†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States -----	7 464	62 702	50 089	1 077 525	759 607	82 280	7 846 146	3 570 085
Alabama -----	115	1 265	1 057	17 598	13 012	1 772	138 306	76 047
Alaska -----	53	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Arizona -----	112	945	694	15 966	9 347	1 178	180 273	62 679
Arkansas -----	38	463	395	6 527	5 096	602	52 624	35 708
California -----	900	4 233	3 361	69 888	50 072	5 285	507 644	229 831
Colorado -----	179	1 612	1 266	24 812	16 922	1 810	161 744	83 231
Connecticut -----	79	723	564	13 247	9 531	1 019	101 791	42 857
Delaware -----	19	211	110	2 932	2 070	190	15 586	8 832
District of Columbia -----	13	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Florida -----	595	7 800	6 355	134 477	94 705	11 273	1 041 509	458 364
Georgia -----	151	1 973	1 642	31 147	21 564	3 022	328 176	130 327
Hawaii -----	45	1 925	1 389	52 913	37 904	2 674	296 046	150 972
Idaho -----	16	131	102	2 105	1 593	154	18 628	9 633
Illinois -----	245	2 782	2 056	52 709	36 275	2 764	346 589	127 095
Indiana -----	134	1 114	846	19 979	12 996	1 532	107 702	61 936
Iowa -----	59	583	448	11 140	7 636	848	66 883	29 152
Kansas -----	81	426	352	8 082	5 755	569	61 799	22 580
Kentucky -----	98	687	570	10 060	7 259	817	58 877	30 777
Louisiana -----	117	1 382	1 149	27 083	19 488	2 051	181 704	91 020
Maine -----	44	573	478	7 927	5 674	870	45 153	26 020
Maryland -----	149	1 516	1 168	26 489	17 017	2 141	241 390	90 475
Massachusetts -----	231	1 845	1 540	35 759	26 904	2 451	240 080	103 356
Michigan -----	186	1 310	994	23 473	15 056	1 404	169 463	72 633
Minnesota -----	122	1 001	723	20 829	13 774	1 116	109 684	54 838
Mississippi -----	71	597	502	7 673	5 405	805	47 806	28 962
Missouri -----	140	919	783	14 375	11 317	1 044	80 112	38 531
Montana -----	29	112	87	1 404	992	145	8 739	6 383
Nebraska -----	49	(D)	172	2 803	2 133	287	18 179	10 503
Nevada -----	60	(D)	410	15 011	10 048	684	115 115	53 540
New Hampshire -----	44	377	330	5 379	3 584	470	29 342	18 859
New Jersey -----	216	1 055	879	16 505	11 427	1 199	119 537	49 981
New Mexico -----	78	(S)	(S)	(S)	(S)	(S)	(S)	(S)
New York -----	500	4 420	3 627	77 688	54 212	5 464	557 187	216 317
North Carolina -----	190	1 796	1 462	25 480	17 850	2 403	194 522	99 601
North Dakota -----	30	232	204	4 171	3 105	379	21 918	14 557
Ohio -----	246	1 463	1 141	22 117	15 382	1 837	153 066	74 527
Oklahoma -----	83	442	361	7 341	5 144	623	48 292	23 514
Oregon -----	117	416	337	6 959	4 987	431	55 240	26 298
Pennsylvania -----	274	1 795	1 438	32 667	23 748	2 490	215 640	105 056
Rhode Island -----	38	378	319	6 101	4 773	504	35 367	13 024
South Carolina -----	88	1 429	1 274	18 735	14 448	2 249	160 170	94 792
South Dakota -----	20	214	189	3 742	3 148	363	21 625	12 729
Tennessee -----	104	1 481	1 183	21 136	15 486	2 127	158 760	81 789
Texas -----	557	5 388	4 089	91 420	60 333	6 777	771 526	313 102
Utah -----	71	617	455	8 989	7 665	749	60 419	27 429
Vermont -----	38	280	226	4 182	2 911	449	25 540	19 131
Virginia -----	225	1 953	1 664	30 438	23 536	2 685	208 630	103 306
Washington -----	195	561	454	9 662	7 421	715	78 122	44 950
West Virginia -----	49	210	191	2 237	1 889	245	11 996	8 983
Wisconsin -----	129	776	599	16 333	11 996	796	107 814	47 781
Wyoming -----	34	177	137	2 867	1 847	228	18 005	9 960

1982—Con.						1977			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Rental payments for machinery, equipment, and structures	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
1 950 601	1 726 651	4 276 061	54 779	88 359	550 680	55 589	4 442 110	1 144 584	(W)	(W)	1	U.S.
40 531	35 768	62 258	523	903	8 028	725	53 379	11 153	8	5	12	Ala.
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	—	—	Alaska
39 658	27 357	117 594	867	3 349	21 972	871	45 169	11 639	7	6	3	Ariz.
21 816	15 530	16 915	107	343	3 235	491	21 194	4 120	6	5	8	Ark.
131 883	106 351	277 812	2 807	4 021	32 244	3 985	396 015	102 749	3	3	10	Calif.
45 843	38 714	78 513	1 371	1 594	7 927	1 375	80 062	19 651	7	8	1	Colo.
27 886	15 949	58 934	886	1 524	9 328	391	39 974	6 437	4	5	19	Conn.
5 053	3 961	6 754	92	78	1 866	(D)	(D)	(D)	2	2	9	Del.
(S)	(D)	(S)	(D)	(D)	(D)	392	13 815	4 819	—	—	—	D.C.
262 230	215 664	583 145	10 387	5 634	44 242	3 970	278 699	71 613	1	1	2	Fla.
58 447	76 277	197 849	1 871	3 081	15 426	1 572	87 011	20 231	6	2	2	Ga.
90 411	62 550	145 074	2 312	3 295	34 975	873	87 440	30 530	1	1	(W)	Hawaii
5 615	4 234	8 995	(D)	23	856	162	10 161	3 369	24	27	(W)	Idaho
87 872	43 480	219 494	1 895	1 571	12 657	2 466	232 293	51 595	4	5	7	Ill.
36 910	26 167	45 766	475	650	6 808	1 224	115 258	27 421	7	6	5	Ind.
16 834	13 632	37 731	313	159	4 616	983	91 509	22 511	9	9	26	Iowa
6 907	15 980	39 219	247	248	4 872	702	44 579	11 197	9	9	15	Kans.
16 707	14 487	28 100	432	1 389	6 946	446	24 836	3 924	9	10	10	Ky.
58 359	34 884	90 684	1 883	953	8 668	833	43 022	7 345	6	6	(W)	La.
14 616	11 743	19 132	416	821	3 684	399	17 152	5 500	10	9	24	Maine
47 254	44 180	150 915	1 577	1 607	10 217	1 577	179 694	31 709	4	2	7	Md.
59 524	(D)	136 724	1 337	(D)	31 432	2 006	206 803	48 350	5	5	—	Mass.
41 864	34 405	96 830	812	1 588	13 652	1 805	176 199	28 487	6	5	14	Mich.
26 902	29 299	54 846	969	(D)	29 597	979	89 423	26 863	6	6	—	Minn.
17 299	12 212	18 844	756	1 710	9 622	233	8 826	2 571	14	12	17	Miss.
19 348	19 807	41 581	316	871	6 983	911	52 080	15 676	7	5	17	Mo.
4 496	1 936	*2 356	28	40	466	298	21 220	11 570	33	24	(W)	Mont.
4 839	5 769	7 676	94	133	1 450	204	19 787	3 564	—	27	31	Nebr.
43 538	(D)	61 575	763	2 180	9 255	616	75 068	21 621	—	3	3	Nev.
10 323	8 754	10 482	298	252	2 218	154	10 510	2 377	13	7	2	N.H.
35 185	15 752	69 555	438	732	5 876	1 897	154 341	29 541	7	6	11	N.J.
(D)	(S)	(S)	(S)	(S)	(S)	305	19 165	7 263	—	—	—	N. Mex.
127 680	97 002	340 870	3 188	3 563	25 754	3 311	214 569	77 293	4	3	11	N.Y.
41 420	59 448	94 921	1 648	1 622	13 644	1 379	68 607	14 905	5	4	16	N.C.
6 559	8 031	7 361	114	388	3 040	343	17 743	5 042	13	17	9	N. Dak.
43 321	37 873	78 539	577	1 632	15 196	1 776	159 229	35 985	5	5	14	Ohio
10 868	13 076	24 778	461	303	3 532	582	64 481	21 661	12	10	5	Okla.
14 272	12 290	28 942	250	227	3 127	382	27 866	9 129	15	12	12	Oreg.
66 743	39 826	110 584	1 038	1 964	20 846	1 955	155 603	55 769	6	4	8	Pa.
(D)	11 570	22 343	212	194	2 085	404	51 025	12 197	7	8	36	R.I.
44 659	51 645	65 378	1 404	2 242	10 406	819	50 486	13 037	4	4	2	S.C.
6 060	6 748	8 896	(D)	(D)	(D)	243	14 084	3 979	1	(W)	—	S. Dak.
32 854	51 563	76 971	1 944	1 127	11 493	1 402	91 451	19 062	5	4	4	Tenn.
128 981	193 913	458 423	5 940	5 472	43 097	4 838	412 128	119 790	2	2	7	Tex.
13 898	13 881	32 990	429	558	3 955	472	42 384	7 735	9	8	15	Utah
8 221	11 221	6 409	136	156	2 886	94	5 931	1 226	14	13	1	Vt.
56 253	48 063	105 323	1 673	2 622	20 172	1 272	82 786	17 638	3	2	4	Va.
17 815	27 506	33 172	157	743	3 496	(S)	(S)	(S)	14	17	31	Wash.
4 685	4 448	3 013	254	262	868	131	*5 282	*809	19	7	17	W. Va.
26 333	23 097	60 032	224	699	8 624	1 082	88 347	16 746	7	11	4	Wis.
6 008	4 177	8 045	32	166	1 462	117	6 363	1 413	26	22	1	Wyo.

Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
Number of establishments in business during year	7 464	4 775	7 651	4 470	1	3	3	4
Number of establishments in business at end of year	7 309	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Proprietors and working partners	1 121	2 122	3 600	2 150	6	6	5	8
All employees**	62 702	55 589	112 215	61 442	1	1	2	5
Construction workers:								
March	49 370	40 564	81 890	48 136	1	1	1	5
May	49 973	45 565	91 761	50 989	1	1	2	5
August	50 094	49 938	103 011	57 531	1	1	2	6
November	48 695	46 614	98 502	53 213	1	1	2	6
Average	50 089	45 707	94 627	52 560	1	1	2	5
Other employees:								
March	12 598	9 208	16 479	8 543	1	2	2	6
Construction worker hours (thousands):								
January to March	20 006	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
April to June	20 829	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
July to September	20 846	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
October to December	20 598	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Total hours worked	82 280	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Payroll, all employees	1 077 525	646 375	977 707	411 858	1	1	1	6
Payroll, construction workers	759 607	484 890	771 876	329 749	1	1	1	6
Payroll, other employees	317 917	161 485	205 831	82 818	1	2	1	6
First quarter payroll, all employees	258 097	135 285	(NA)	(NA)	1	1	(NA)	(NA)
Employer costs for fringe benefits	201 018	119 442	(NA)	(NA)	1	1	(NA)	(NA)
Legally required expenditures	147 823	74 468	(NA)	(NA)	1	1	(NA)	(NA)
Voluntary expenditures	53 194	44 974	(NA)	(NA)	1	1	(NA)	(NA)
All business receipts	7 953 314	4 514 747	6 525 533	2 759 895	1	1	1	2
Total construction receipts	7 846 146	4 442 110	6 407 131	2 708 839	1	1	1	2
Receipts for work subcontracted in from others	291 813	110 648	189 919	100 172	6	3	4	3
Land receipts ¹	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts	107 167	72 637	118 402	49 949	2	5	4	4
Net construction receipts†	3 570 085	2 202 760	3 033 312	1 243 330	1	1	1	2
Value added††	1 950 601	1 144 584	1 561 851	686 370	1	1	2	5
Selected payments	6 002 712	3 370 163	4 963 682	2 069 831	1	1	1	2
Materials, components, and supplies ²	1 659 617	1 084 421	1 589 863	614 609	1	1	2	5
Construction work subcontracted to others	4 276 061	2 239 350	3 373 819	1 454 985	1	1	1	2
Selected power, fuels, and lubricants	67 033	46 392	(NA)	(NA)	1	2	(NA)	(NA)
Electricity	26 954	10 100	(NA)	(NA)	1	4	(NA)	(NA)
Natural gas	3 063	4 350	(NA)	(NA)	3	2	(NA)	(NA)
Gasoline and diesel fuel (including gasohol)	31 850	22 312	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	5 165	9 629	(NA)	(NA)	4	2	(NA)	(NA)
Storage capacity for fuels ³ (thousand gallons)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures	54 779	34 448	(NA)	(NA)	1	1	(NA)	(NA)
For machinery and equipment	41 837	28 570	40 597	19 457	1	1	2	3
For structures	12 942	5 878	(NA)	(NA)	2	2	(NA)	(NA)
Selected purchased services	47 462	33 389	(NA)	(NA)	1	2	(NA)	(NA)
Communication services	19 252	14 717	(NA)	(NA)	2	2	(NA)	(NA)
Repairs to structures and related facilities	3 711	4 291	(NA)	(NA)	5	11	(NA)	(NA)
Repairs to machinery and equipment	24 499	14 381	(NA)	(NA)	2	2	(NA)	(NA)
Ownership of construction projects:								
Total construction receipts	7 846 146	4 442 110	6 407 131	2 708 839	1	1	1	2
Government owned	1 220 146	1 009 153	1 164 604	(NA)	3	1	1	(NA)
Privately owned	6 626 000	3 432 597	5 242 527	(NA)	1	1	1	(NA)

¹Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

²For 1967 and 1972, includes data for power, fuels, and lubricants.

³Data were collected only for establishments classified as heavy construction contractors.

**Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll:
1982 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets -----	512 564	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	88 359	65 680	63 220	32 006	2	3	3	5
New -----	67 143	56 468	54 841	28 008	1	3	4	5
Used -----	21 216	9 212	8 379	3 998	4	5	9	22
Retirements and disposition of depreciable assets -----	50 243	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	550 680	310 887	400 441	(NA)	1	2	3	(NA)
Depreciation charges during year -----	61 104	27 675	32 305	(NA)	1	3	3	(NA)
Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets -----	188 073	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	37 917	31 916	29 351	18 713	2	7	8	14
New structures and related facilities -----	31 769	29 402	26 254	17 603	1	4	6	5
Used structures and related facilities -----	6 148	2 514	3 097	1 110	10	10	11	24
Retirements and disposition of depreciable assets -----	33 229	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	192 762	146 374	205 807	(NA)	2	2	5	(NA)
Depreciation charges during year -----	12 928	7 363	10 622	(NA)	2	10	6	(NA)
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets -----	324 490	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	50 441	33 763	33 869	13 293	3	4	5	17
New machinery and equipment, including automobiles and trucks -----	35 374	27 066	28 587	10 405	3	2	3	6
New automobiles and trucks, intended primarily for highway use -----	17 436	15 124	(NA)	(NA)	4	3	(NA)	(NA)
Used machinery and equipment, including automobiles and trucks -----	15 067	6 697	5 282	2 888	5	6	8	29
Retirements and disposition of depreciable assets -----	17 014	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	357 917	164 513	194 634	(NA)	1	1	2	(NA)
Depreciation charges during year -----	48 176	20 312	21 683	(NA)	2	2	2	(NA)

Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	7 464	1
Total construction receipts	7 846 146	1
Establishments with inventories:		
Number	1 016	10
Total construction receipts	1 456 693	2
Inventories ¹ :		
End of 1982, total	43 444	4
Value for establishments with LIFO reserve	(D)	-
Amount of LIFO reserve	(D)	-
Value for establishments with no LIFO reserve	(D)	-
End of 1981, total	33 277	7
Value for establishments with LIFO reserve	8 005	22
Amount of LIFO reserve	7 810	22
Value for establishments with no LIFO reserve	25 272	6
Establishments with no inventories:		
Number	6 448	1
Total construction receipts	6 389 453	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Establishments with an average of—									
	Total	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1982										
Number of establishments -----	7 464	(S)	1 103	697	423	171	60	7	1	1
All employees** -----	62 702	(S)	7 214	9 119	12 870	11 468	8 390	4 759	(D)	(D)
Payroll, all employees -----	1 077 525	(S)	108 068	147 881	244 316	206 666	161 025	100 554	(D)	(D)
Construction worker hours (thousands) -----	82 280	(S)	8 957	10 782	17 428	15 351	11 582	6 887	(D)	(D)
All business receipts -----	7 953 314	(S)	667 876	1 028 707	1 862 903	1 610 773	1 384 265	604 218	(D)	(D)
Total construction receipts -----	7 846 146	(S)	658 003	1 017 759	1 845 153	1 574 707	1 372 504	593 648	(D)	(D)
Net construction receipts† -----	3 570 085	(S)	363 851	499 198	803 262	680 062	478 440	298 588	(D)	(D)
Value added†† -----	1 950 601	(S)	207 861	270 970	431 558	377 365	242 240	175 641	(D)	(D)
Payments for materials, components, supplies, and fuels -----	1 726 651	(S)	165 863	239 176	389 454	338 762	247 960	133 517	(D)	(D)
Payments for construction work subcontracted to others -----	4 276 061	(S)	294 152	518 560	1 041 890	894 645	894 064	295 060	(D)	(D)
Rental payments for machinery, equipment, and structures -----	54 779	(S)	4 338	7 044	10 881	10 131	12 162	5 236	(D)	(D)
Capital expenditures, other than land -----	88 359	(S)	9 351	8 918	13 684	21 054	21 988	5 016	(D)	(D)
End-of-year gross book value of depreciable assets -----	550 680	(S)	61 722	71 053	110 493	119 042	77 454	40 874	(D)	(D)
1977										
All employees** -----	55 589	5 315	6 543	8 327	13 073	7 208	7 713	7 410	(D)	-
Total construction receipts -----	4 442 110	357 851	449 010	580 604	1 087 327	639 754	744 782	582 783	(D)	-
Value added†† -----	1 144 584	87 804	118 874	161 891	276 153	139 980	195 628	164 253	(D)	-
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	-	4	3	2	(W)	(W)	(W)	-	-
Net construction receipts† -----	1	-	5	3	1	(W)	(W)	(W)	-	-
Capital expenditures, other than land -----	2	-	11	11	1	(W)	(W)	(W)	-	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with all business receipts of—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1982											
Number of establishments	7 464	(S)	(S)	(S)	(S)	1 082	796	549	270	179	153
All employees**	62 702	(S)	(S)	(S)	(S)	5 538	6 945	8 317	8 270	7 925	16 954
Payroll, all employees	1 077 525	(S)	(S)	(S)	(S)	75 393	105 166	135 109	153 022	150 599	373 760
Construction worker hours (thousands)	82 280	(S)	(S)	(S)	(S)	6 863	8 748	10 534	10 993	10 491	24 420
All business receipts	7 953 314	(S)	(S)	(S)	(S)	385 644	563 591	849 748	965 269	1 234 204	3 568 892
Total construction receipts	7 846 146	(S)	(S)	(S)	(S)	379 859	555 554	838 468	954 321	1 222 862	3 514 027
Net construction receipts†	3 570 085	(S)	(S)	(S)	(S)	230 097	327 013	470 419	480 078	553 638	1 261 625
Value added††	1 950 601	(S)	(S)	(S)	(S)	138 254	187 442	262 024	253 041	285 718	674 778
Payments for materials, components, supplies, and fuels	1 726 651	(S)	(S)	(S)	(S)	97 628	147 607	219 675	237 985	279 261	641 711
Payments for construction work subcontracted to others	4 276 061	(S)	(S)	(S)	(S)	149 762	228 541	368 048	474 243	669 224	2 252 402
Rental payments for machinery, equipment, and structures	54 779	(S)	(S)	(S)	(S)	2 801	4 091	5 816	7 108	8 018	24 617
Capital expenditures, other than land	88 359	(S)	(S)	(S)	(S)	5 174	8 486	8 636	10 459	15 617	35 137
End-of-year gross book value of depreciable assets	550 680	(S)	(S)	(S)	(S)	38 903	55 484	71 363	84 317	83 743	176 942
1977											
All employees**	55 589	(S)	895	1 805	4 909	5 248	6 820	8 993	6 934	119 257	(NA)
Total construction receipts	4 442 110	(S)	14 902	47 201	173 906	241 011	373 861	699 616	634 799	12 249 986	(NA)
Value added††	1 144 584	(S)	4 052	15 590	54 733	71 275	111 705	180 808	165 397	1539 141	(NA)
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	—	—	—	—	5	4	3	(W)	(W)	(W)
Net construction receipts†	1	—	—	—	—	4	4	4	1	(W)	(W)
Capital expenditures, other than land	2	—	—	—	—	15	12	10	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Construction receipts				Relative standard error of estimate (percent) for column—			
	Total	New construction		Maintenance and repair				
		Total	Additions and alterations ¹					
	A	B	C	D	A	B	C	D
1982								
Total construction receipts†	7 846 146	7 442 574	1 244 246	403 572	1	1	1	2
Building construction	7 713 199	7 331 900	1 240 681	381 298	1	(W)	1	2
Single-family houses	362 690	326 506	72 809	36 184	2	2	4	5
Single-family houses, detached	156 835	135 222	31 019	21 613	3	4	6	8
Single-family houses, attached	205 854	191 283	41 789	14 570	2	2	4	5
Apartment buildings with two or more apartments	4 611 036	4 374 513	701 628	236 523	1	1	1	3
Other residential buildings	1 449 325	1 392 267	219 893	57 058	1	1	4	10
Office and bank buildings	427 581	416 453	54 404	11 128	1	1	3	8
Office buildings	340 733	331 470	42 793	9 262	1	1	4	9
Bank buildings and other financial institutions	86 848	84 983	11 611	1 865	1	1	4	14
Industrial buildings and warehouses	252 778	233 245	43 253	19 533	2	1	3	5
Industrial buildings	165 434	149 794	30 595	15 640	2	2	5	3
Warehouses	87 343	83 450	12 657	3 893	3	3	5	18
Stores, restaurants, public garages, and automobile service stations	172 673	163 583	39 666	9 090	2	2	6	3
Educational buildings	111 100	105 400	30 387	5 700	2	2	3	6
Hospitals and institutional buildings	207 024	204 876	55 063	2 148	(W)	(W)	1	7
Amusement, social, and recreational buildings	63 564	62 745	7 233	818	3	3	9	12
Other nonresidential buildings	55 428	52 312	16 345	3 116	7	6	13	30
Nonbuilding construction	111 541	(D)	(D)	(D)	2	-	-	-
Construction work, n.s.k.	21 406	(D)	(D)	(D)	(W)	-	-	-
1977								
Total construction receipts†	4 442 110	4 064 046	(NA)	378 064	1	1	(NA)	2
Building construction	4 323 107	3 952 486	(NA)	370 621	1	1	(NA)	2
Single-family houses	201 017	159 909	(NA)	41 108	3	4	(NA)	5
Apartment buildings with two or more apartments	2 670 696	2 492 112	(NA)	178 584	1	1	(NA)	3
Other residential buildings	706 837	629 886	(NA)	76 951	1	2	(NA)	3
Office and bank buildings	125 873	112 273	(NA)	13 600	2	2	(NA)	8
Industrial buildings and warehouses	207 428	187 861	(NA)	19 567	2	3	(NA)	5
Stores, restaurants, public garages, and automobile service stations	112 378	98 070	(NA)	14 308	4	4	(NA)	5
Educational buildings	74 094	69 698	(NA)	4 396	1	1	(NA)	6
Hospitals and institutional buildings	148 498	133 344	(NA)	15 154	(W)	(W)	(NA)	2
Other nonresidential buildings	76 287	69 333	(NA)	6 954	4	4	(NA)	8
Nonbuilding construction	118 906	111 433	(NA)	7 473	1	1	(NA)	5
Construction work, n.s.k.	119	79	(NA)	*40	38	29	(NA)	56

¹For 1977, separate data were not collected. These data are included with "New Construction."

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments	7 464	62 702	1 077 525	7 846 146	5 362 962	3 570 085	1 950 601	4 276 061	1	1	1
Establishments not specializing by type	603	11 694	233 547	1 498 477	(NA)	719 874	411 613	778 602	2	1	1
Establishments specializing 51 percent or more	6 861	51 007	843 978	6 347 669	5 362 962	2 850 210	1 538 988	3 497 458	1	1	1
APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS											
All establishments specializing in type	5 167	40 442	659 137	4 843 813	4 165 940	2 190 264	1 175 519	2 653 548	1	1	1
Establishments with—											
100 percent specialization	3 840	20 249	315 074	2 198 875	2 198 875	1 044 836	566 264	1 154 038	2	1	1
90 to 99 percent specialization	283	4 897	75 059	531 764	499 196	249 363	128 595	282 401	4	3	3
80 to 89 percent specialization	270	3 403	65 205	526 327	434 546	200 464	105 233	325 863	5	2	2
70 to 79 percent specialization	380	4 881	80 033	640 815	472 221	273 535	147 376	367 280	4	2	1
60 to 69 percent specialization	277	4 086	68 073	517 783	325 218	245 684	140 533	272 099	3	3	2
51 to 59 percent specialization	116	2 924	55 690	428 247	235 882	176 381	87 516	251 866	3	2	2
OTHER RESIDENTIAL BUILDINGS											
All establishments specializing in type	586	8 494	165 452	1 386 637	1 087 290	575 759	313 635	810 877	3	1	1
Establishments with—											
100 percent specialization	271	2 638	45 577	320 878	320 878	162 850	93 604	158 027	5	3	2
90 to 99 percent specialization	28	639	15 999	131 319	124 463	62 657	35 848	68 662	5	5	4
80 to 89 percent specialization	55	1 014	19 981	210 238	172 580	69 432	39 320	140 806	10	2	1
70 to 79 percent specialization	118	1 982	37 267	298 874	219 494	142 174	67 762	156 700	5	3	3
60 to 69 percent specialization	67	981	22 302	168 174	104 956	57 628	41 558	110 546	6	5	4
51 to 59 percent specialization	48	1 239	24 325	257 153	144 917	81 017	35 541	176 136	2	1	(W)

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
	A	B	C	D	E	F	G
United States	7 464	50 089	82 280	49 370	20 006	49 973	20 829
Alabama	115	1 057	1 772	1 086	429	1 078	455
Alaska	53	(S)	(S)	(S)	(S)	(S)	(S)
Arizona	112	694	1 178	731	291	681	277
Arkansas	38	395	602	342	117	378	153
California	900	3 361	5 285	3 401	1 355	3 127	1 281
Colorado	179	1 266	1 810	1 335	480	1 204	428
Connecticut	79	564	1 019	549	256	552	256
Delaware	19	110	190	135	60	119	52
District of Columbia	13	(S)	(S)	(S)	(S)	(S)	(S)
Florida	595	6 355	11 273	7 130	3 141	6 687	2 934
Georgia	151	1 642	3 022	1 618	690	1 647	748
Hawaii	45	1 389	2 674	1 632	781	1 537	772
Idaho	16	102	154	105	32	83	32
Illinois	245	2 056	2 764	1 766	573	2 055	707
Indiana	134	846	1 532	768	351	865	399
Iowa	59	448	848	466	224	484	248
Kansas	81	352	569	330	129	352	152
Kentucky	98	570	817	507	179	552	193
Louisiana	117	1 149	2 051	1 033	424	1 261	611
Maine	44	478	870	287	136	341	165
Maryland	149	1 168	2 141	974	443	1 094	519
Massachusetts	231	1 540	2 451	1 285	526	1 536	618
Michigan	186	994	1 404	950	319	960	353
Minnesota	122	723	1 116	617	249	678	271
Mississippi	71	502	805	473	179	607	224
Missouri	140	783	1 044	704	218	773	260
Montana	29	87	145	84	40	102	40
Nebraska	49	172	287	166	58	165	62
Nevada	60	410	684	487	210	414	176
New Hampshire	44	330	470	348	124	306	116
New Jersey	216	879	1 199	752	267	892	316
New Mexico	78	(S)	(S)	(S)	(S)	(S)	(S)
New York	500	3 627	5 464	3 445	1 329	3 627	1 345
North Carolina	190	1 462	2 403	1 333	547	1 426	581
North Dakota	30	204	379	176	75	175	86
Ohio	246	1 141	1 837	1 053	420	1 125	452
Oklahoma	83	361	623	468	177	353	166
Oregon	117	337	431	282	88	303	96
Pennsylvania	274	1 438	2 490	1 248	532	1 338	589
Rhode Island	38	319	504	275	102	388	146
South Carolina	88	1 274	2 249	1 511	636	1 377	607
South Dakota	20	189	363	169	82	168	77
Tennessee	104	1 183	2 127	1 232	495	1 185	556
Texas	557	4 089	6 777	4 222	1 685	3 898	1 645
Utah	71	455	749	459	179	451	190
Vermont	38	226	449	195	96	205	99
Virginia	225	1 664	2 685	1 586	609	1 716	700
Washington	195	454	715	401	163	422	175
West Virginia	49	191	245	193	58	219	67
Wisconsin	129	599	796	641	243	623	212
Wyoming	34	137	228	123	49	146	67

¹Sum of construction workers during pay periods including 12th of March, May, August, and November.

Payroll by State: 1982

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
50 094	20 846	48 695	20 598	(W)	(W)	1	1	1	1	1	1	1	1	U.S.
1 084	456	961	431	8	8	7	7	7	7	12	12	10	9	Ala.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	Alaska
700	318	636	291	8	7	9	10	8	8	9	8	9	9	Ariz.
408	155	438	176	6	7	8	13	8	11	5	7	4	5	Ark.
3 178	1 275	3 304	1 372	4	4	6	7	3	4	3	4	7	8	Calif.
1 233	432	1 285	469	7	6	7	7	7	8	8	8	7	7	Colo.
596	267	543	239	5	4	4	5	5	6	5	5	5	6	Conn.
100	42	81	34	2	3	2	3	2	3	2	4	3	5	Del.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	D.C.
5 896	2 662	5 491	2 535	1	1	1	1	1	1	1	1	1	2	Fla.
1 664	782	1 594	800	7	2	6	3	8	3	10	3	8	3	Ga.
1 196	620	1 027	500	1	1	1	1	1	1	(W)	1	1	1	Hawaii
106	43	119	45	26	25	37	33	21	28	14	19	33	34	Idaho
2 275	739	2 041	743	5	6	5	8	8	11	5	6	5	6	Ill.
916	414	791	367	8	8	7	7	8	9	9	10	9	10	Ind.
453	205	391	169	9	8	9	8	10	9	10	12	9	11	Iowa
363	148	337	139	8	6	8	8	9	10	12	9	7	9	Kans.
589	195	623	248	9	11	9	13	9	13	13	15	9	16	Ky.
1 140	516	1 137	499	6	5	4	3	14	13	5	3	7	4	La.
624	281	654	287	10	8	11	12	7	10	12	10	11	8	Maine
1 314	588	1 219	589	4	4	3	5	3	4	4	5	4	5	Md.
1 756	689	1 519	616	6	5	6	6	6	6	7	6	6	6	Mass.
938	342	1 097	388	7	7	6	7	6	7	7	8	10	11	Mich.
767	296	779	299	9	8	9	9	8	10	10	11	11	11	Minn.
463	199	457	202	13	13	13	10	21	16	13	15	16	21	Miss.
812	296	818	269	6	7	9	10	6	9	7	9	9	11	Mo.
84	*31	72	*32	33	33	32	38	34	39	37	43	31	41	Mont.
212	88	135	77	27	15	30	25	26	22	34	21	15	12	Nebr.
394	158	320	138	8	7	10	8	7	9	17	15	7	11	Nev.
347	131	301	98	15	12	18	17	19	19	15	12	11	12	N.H.
967	327	839	287	7	8	8	11	7	10	8	10	7	10	N.J.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	N. Mex.
3 728	1 373	3 616	1 415	4	4	5	5	6	5	8	4	4	5	N.Y.
1 501	639	1 537	634	4	5	4	6	4	5	4	8	6	6	N.C.
251	115	224	101	13	14	13	17	13	16	15	17	12	16	N. Dak.
1 129	463	1 205	500	5	5	6	9	5	6	5	7	6	7	Ohio
311	138	302	141	14	14	26	23	17	23	7	11	7	10	Okla.
389	144	308	102	15	16	12	18	15	20	21	28	12	18	Oreg.
1 452	656	1 571	710	5	6	5	7	6	6	8	7	6	7	Pa.
234	96	378	159	6	6	8	9	8	7	11	12	5	5	R.I.
989	462	1 208	543	4	4	7	7	4	4	5	4	2	3	S.C.
226	108	192	94	1	2	2	4	2	4	1	3	1	3	S. Dak.
1 126	524	1 157	551	6	5	6	6	6	5	7	6	6	6	Tenn.
4 001	1 722	4 154	1 723	3	3	3	3	3	4	2	3	3	3	Tex.
485	202	423	177	12	12	9	11	12	14	16	16	14	17	Utah
229	108	274	145	14	14	14	16	15	17	17	19	12	13	Vt.
1 652	697	1 668	677	4	3	3	4	3	3	4	5	6	6	Va.
489	190	442	185	11	13	10	17	9	14	14	18	15	22	Wash.
182	64	165	55	20	25	22	29	19	24	24	35	22	31	W. Va.
679	218	413	122	5	7	4	8	5	8	7	9	9	16	Wis.
139	62	119	49	26	23	30	26	30	33	25	27	24	25	Wyo.

Table 10. **Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1982					1977 construction receipts for work done in this State	Percent change 1982/ 1977 (col A÷F)	Relative standard error of estimate (percent) for column—		
	Construction receipts for work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Construction receipts	Number	Construction receipts					
A	B	C	D	E	F	G	A	C	E	
United States -----	7 846 146	7 369	6 915 044	861	931 102	4 442 110	76.6	1	1	1
Alabama -----	124 812	114	88 015	12	36 797	35 530	251.3	4	5	(W)
Alaska -----	29 184	53	25 491	*9	3 693	85 112	-65.7	5	(W)	38
Arizona -----	176 419	108	170 541	12	5 878	36 376	385.0	3	3	29
Arkansas -----	78 703	34	34 098	12	44 605	19 639	300.7	3	8	(W)
California -----	516 493	899	(D)	14	(D)	346 805	48.9	3	-	-
Colorado -----	182 845	178	146 924	10	35 921	88 906	105.7	5	7	(W)
Connecticut -----	104 123	79	96 524	13	7 598	42 710	143.8	3	3	(W)
Delaware -----	13 645	19	(D)	1	(D)	3 185	328.4	3	-	-
District of Columbia -----	68 155	*13	1 763	27	66 392	49 006	39.1	2	31	2
Florida -----	1 117 475	587	1 024 964	43	92 511	279 672	299.6	1	1	1
Georgia -----	260 126	149	219 452	32	40 673	101 538	156.2	1	1	(W)
Hawaii -----	296 324	45	296 046	*8	(S)	94 421	213.8	1	1	-
Idaho -----	12 434	16	(D)	*4	(D)	13 714	-9.3	23	-	-
Illinois -----	332 950	239	322 913	15	10 036	241 293	38.0	3	3	1
Indiana -----	113 787	133	105 977	18	7 810	110 315	3.1	6	6	18
Iowa -----	39 259	59	(D)	*5	(D)	76 116	-48.4	11	-	-
Kansas -----	46 603	81	38 146	21	8 456	41 507	12.3	7	8	8
Kentucky -----	77 195	96	49 935	26	27 260	43 710	76.6	8	13	1
Louisiana -----	185 899	116	176 762	15	9 137	50 776	266.1	5	6	(W)
Maine -----	50 323	44	44 173	9	6 149	22 705	121.6	9	10	7
Maryland -----	148 531	144	130 721	21	17 809	133 906	10.9	3	3	3
Massachusetts -----	240 143	231	220 975	17	19 168	178 346	34.7	3	4	9
Michigan -----	155 396	184	(D)	9	(D)	187 421	-17.1	5	-	-
Minnesota -----	134 122	118	104 275	16	29 847	99 822	34.4	4	5	2
Mississippi -----	51 545	70	42 584	21	8 960	12 067	327.2	12	13	35
Missouri -----	97 780	135	77 082	19	20 698	76 822	27.3	3	4	10
Montana -----	16 149	29	7 356	15	8 793	21 917	-26.3	20	33	32
Nebraska -----	16 762	49	15 558	8	1 203	21 512	-22.1	19	20	8
Nevada -----	117 978	60	114 275	9	3 702	87 817	34.3	5	5	9
New Hampshire -----	30 929	43	23 631	12	7 297	23 879	29.5	6	7	2
New Jersey -----	128 333	213	113 618	30	14 715	120 529	6.5	4	4	15
New Mexico -----	25 709	78	19 596	8	6 113	27 529	-6.6	21	28	(W)
New York -----	553 909	499	535 806	15	18 103	212 830	160.3	2	2	(W)
North Carolina -----	156 930	190	131 485	34	25 445	81 310	93.0	5	5	1
North Dakota -----	22 560	30	17 957	*12	*4 602	16 481	36.9	14	16	43
Ohio -----	124 307	245	119 067	18	5 240	124 849	-4	4	5	17
Oklahoma -----	74 923	82	46 563	19	28 360	65 140	15.0	7	10	7
Oregon -----	36 522	111	35 018	9	*1 504	29 311	24.6	19	20	47
Pennsylvania -----	218 035	269	200 656	16	17 378	170 047	28.2	4	5	(W)
Rhode Island -----	29 394	35	21 742	33	7 652	37 465	-21.5	5	5	13
South Carolina -----	196 517	88	135 668	35	60 849	64 462	204.9	2	3	2
South Dakota -----	10 198	16	(D)	*4	(D)	17 780	-42.6	(W)	-	-
Tennessee -----	120 113	100	107 273	22	12 840	89 864	33.7	5	6	(W)
Texas -----	770 693	553	717 834	27	52 859	378 727	103.5	1	1	2
Utah -----	52 173	66	(D)	*4	(D)	38 904	34.1	9	-	-
Vermont -----	28 465	38	25 540	13	2 924	5 310	436.1	11	12	(W)
Virginia -----	226 089	222	178 767	41	47 321	120 822	87.1	2	3	1
Washington -----	66 843	194	48 999	16	17 844	121 794	-45.1	14	19	4
West Virginia -----	42 959	44	11 227	20	31 732	4 832	789.1	1	4	(W)
Wisconsin -----	81 898	129	(D)	7	(D)	78 326	4.6	12	-	-
Wyoming -----	43 461	34	18 005	22	25 456	9 303	367.2	13	25	12

Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All business receipts		Relative standard error of estimate (percent)	
	1982	1977	1982	1977
All kinds of business	7 953 314	4 514 747	1	1
General building contractor	6 280 815	3 818 202	1	1
Operative builder	110 544	85 010	2	10
Highway and street contractor	47 744	9 029	7	4
Heavy construction contractor	51 466	32 600	4	2
Subdivider and developer	9 550	10 742	30	6
Construction management	341 017	72 498	1	5
Carpentry contractor	31 757	5 357	8	12
Concrete contractor	21 561	7 161	4	3
Electrical contractor	1 290	5 734	25	8
Plumbing contractor	11 414	9 618	4	8
Residential remodeling contractor	184 070	14 738	5	10
Real estate agents and managers	14 537	13 654	22	18
Sale of land	21 623	15 839	9	3
Other activities	825 926	414 565	3	2

Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	1982	1977	1972	Relative standard error of estimate (percent) for 1982
AVERAGE PER ESTABLISHMENT				
Number of employees**	8.4	11.6	14.7	1
Number of construction workers	6.7	9.6	12.4	1
Number of all other employees	1.7	1.9	2.2	1
Payroll, all employees	144.4	135.4	127.8	1
Construction worker wages	101.8	101.6	100.9	1
Other employee salaries	42.6	33.8	26.9	1
All business receipts	1 065.6	945.5	852.9	1
Total construction receipts	1 051.2	930.3	837.4	1
Payments for materials, components, supplies, and fuels	231.3	236.8	207.8	1
Construction work subcontracted to others	572.9	469.0	441.0	1
Capital expenditures, other than land	11.8	13.8	8.3	2
Gross book value of depreciable assets	73.8	65.1	52.3	1
AVERAGE PER EMPLOYEE				
Payroll, all employees	17.2	11.6	8.7	1
All business receipts	126.8	81.2	58.2	1
Value added††	31.1	20.6	13.9	1
AVERAGE PER CONSTRUCTION WORKER				
Construction worker wages	15.2	10.6	8.2	1
Total construction receipts	156.6	97.2	67.7	1
Construction worker hours	1.6	(NA)	(NA)	1
AVERAGE PER OTHER EMPLOYEE				
Other employee salaries	25.2	17.5	12.5	1
AVERAGE PER DOLLAR OF TOTAL CONSTRUCTION RECEIPTS				
Payroll, all employees .....	.137	.146	.153	1
Payments for materials, components, supplies, and fuels .....	.220	.255	.248	1
Payments for construction work subcontracted to others .....	.545	.504	.527	1
Capital expenditures, other than land .....	.011	.015	.010	2
Rental payments for machinery, equipment, and structures .....	.007	.008	(NA)	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Average per dollar of total construction receipts				
					Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures
United States -----	8.4	17.2	1.6	156.6	.137	.220	.545	.011	.007
Alabama -----	11.0	13.9	1.7	130.8	.127	.259	.450	.007	.004
Alaska -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Arizona -----	8.4	16.9	1.7	259.8	.089	.152	.652	.019	.005
Arkansas -----	12.2	14.1	1.5	133.2	.124	.295	.321	.007	.002
California -----	4.7	16.5	1.6	151.0	.138	.209	.547	.008	.006
Colorado -----	9.0	15.4	1.4	127.8	.153	.239	.485	.010	.008
Connecticut -----	9.2	18.3	1.8	180.5	.130	.157	.579	.015	.009
Delaware -----	11.1	13.9	1.7	141.7	.188	.254	.433	.005	.006
District of Columbia -----	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(D)
Florida -----	13.1	17.2	1.8	163.9	.129	.207	.560	.005	.010
Georgia -----	13.1	15.8	1.8	199.9	.095	.232	.603	.009	.006
Hawaii -----	42.8	27.5	1.9	213.1	.179	.211	.490	.011	.008
Idaho -----	8.2	16.1	1.5	182.6	.113	.227	.483	.001	(D)
Illinois -----	11.4	18.9	1.3	168.6	.152	.125	.633	.005	.005
Indiana -----	8.3	17.9	1.8	127.3	.186	.243	.425	.006	.004
Iowa -----	9.9	19.1	1.9	149.3	.167	.204	.564	.002	.005
Kansas -----	5.3	19.0	1.6	175.6	.131	.259	.635	.004	.004
Kentucky -----	7.0	14.6	1.4	103.3	.171	.246	.477	.024	.007
Louisiana -----	11.8	19.6	1.8	158.1	.149	.192	.499	.005	.010
Maine -----	13.0	13.8	1.8	94.5	.176	.260	.424	.018	.009
Maryland -----	10.2	17.5	1.8	206.7	.110	.183	.625	.007	.007
Massachusetts -----	8.0	19.4	1.6	155.9	.149	(D)	.569	(D)	.006
Michigan -----	7.0	17.9	1.4	170.5	.139	.203	.571	.009	.005
Minnesota -----	8.2	20.8	1.5	151.7	.190	.267	.500	(D)	.009
Mississippi -----	8.4	12.9	1.6	95.2	.161	.255	.394	.036	.016
Missouri -----	6.6	15.6	1.3	102.3	.179	.247	.519	.011	.004
Montana -----	3.9	12.5	1.7	100.4	.161	.222	*.270	.005	.003
Nebraska -----	(D)	(D)	1.7	105.7	.154	.317	.422	.007	.005
Nevada -----	(D)	(D)	1.7	280.8	.130	(D)	.535	.019	.007
New Hampshire -----	8.6	14.3	1.4	88.9	.183	.298	.357	.009	.010
New Jersey -----	4.9	15.6	1.4	136.0	.138	.132	.582	.006	.004
New Mexico -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
New York -----	8.8	17.6	1.5	153.6	.139	.174	.612	.006	.006
North Carolina -----	9.5	14.2	1.6	133.1	.131	.306	.488	.008	.008
North Dakota -----	7.7	18.0	1.9	107.4	.190	.366	.336	.018	.005
Ohio -----	5.9	15.1	1.6	134.2	.144	.247	.513	.011	.004
Oklahoma -----	5.3	16.6	1.7	133.8	.152	.271	.513	.006	.010
Oregon -----	3.6	16.7	1.3	163.9	.126	.222	.524	.004	.005
Pennsylvania -----	6.6	18.2	1.7	150.0	.151	.185	.513	.009	.005
Rhode Island -----	9.9	16.1	1.6	110.9	.173	.327	.632	.005	.006
South Carolina -----	16.2	13.1	1.8	125.7	.117	.322	.408	.014	.009
South Dakota -----	10.7	17.5	1.9	114.4	.173	.312	.411	(D)	(D)
Tennessee -----	14.2	14.3	1.8	134.2	.133	.325	.485	.007	.012
Texas -----	9.7	17.0	1.7	188.7	.118	.251	.594	.007	.008
Utah -----	8.7	14.6	1.6	132.8	.149	.230	.546	.009	.007
Vermont -----	7.4	14.9	2.0	113.0	.164	.439	.251	.006	.005
Virginia -----	8.7	15.6	1.6	125.4	.146	.230	.505	.013	.008
Washington -----	2.9	17.2	1.6	172.1	.124	.352	.425	.010	.002
West Virginia -----	4.3	10.7	1.3	62.8	.186	.371	.251	.022	.021
Wisconsin -----	6.0	21.0	1.3	180.0	.151	.214	.557	.006	.002
Wyoming -----	5.2	16.2	1.7	131.4	.159	.232	.447	.009	.002

APPENDIX A.

Explanation of Terms

Construction—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- demolition of existing structures.

Construction does not include:

- shipbuilding.
- manufacturing of other mobile structures.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Number of establishments in business at end of year—Includes all full-year or part-year establishments that were in business at the end of 1982.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

All employees—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

Construction workers—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

Payroll—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

Employer costs for fringe benefits—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

All business receipts—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

Total construction receipts—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see "land receipts" below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

Receipts for work subcontracted in from others—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

Other business receipts—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Net construction receipts—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Selected payments—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors. General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

- payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

Storage capacity for fuels—Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

Rental payments for machinery, equipment, and structures—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

Selected purchased services—Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

Fixed assets and depreciation—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book value-acquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

Capital expenditures—Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- **New structures and related facilities**—Includes the total expenditures during 1982 for new buildings and structures, major additions and alterations to buildings and structures, and other facilities for the reporting establishment's use (such as roads, docks, tracks, parking lots, and fences). It excludes expenditures for land.
- **New machinery and equipment**—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- **New automobiles and trucks intended primarily for highway use**—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- **Used structures and related facilities**—Covers expenditures for used structures and related facilities acquired from others.
- **Used machinery and equipment**—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks. Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

Value of inventories—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Establishments building structures on their own land for sale (operative builders) were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

Ownership of construction projects—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (includes townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- **Other residential buildings**—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- **Bank buildings and other financial institutions**—Includes all buildings which are used primarily to house banks or other financial institutions.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Note that heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are NOT included in this category, but are shown under nonbuilding construction.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices.
- **Other commercial buildings such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, complete shopping centers, department stores, drug stores, restaurants, public garages, and auto service stations.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

Nonbuilding construction:

- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Elevated highways**—Includes roads, highways, and causeways built on structural supports.
- **Bridges**—Includes viaducts, trestles, and overpasses.
- **Tunnels**—Includes highway, pedestrian, and railway tunnels, etc.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.

- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- **Power and communication transmission lines, towers, and related facilities**—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.
- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining apertures such as tipplers and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

Location of construction work—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.

APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family Houses	174	Masonry, Stonework, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stonework Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentering and Flooring Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentering Special Trade Contractors
16	CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—GENERAL CONTRACTORS	1752	Floor Laying and Other Floorwork Special Trade Contractors, N.E.C.
161	Highway and Street Construction, Except Elevated Highways	176	Roofing and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors	1761	Roofing and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipe Line, Communication and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, N.E.C.	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting, Paper Hanging, and Decorating Special Trade Contractors	1794	Excavating and Foundation Work Special Trade Contractors
1721	Painting, Paper Hanging, and Decorating Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.
		1799	Special Trade Contractors, N.E.C.
		6552	SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES

APPENDIX C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

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PUBLICATION PROGRAM

1982 CENSUS OF CONSTRUCTION INDUSTRIES

Publications of the 1982 Census of Construction Industries, containing data on construction establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

Preliminary Reports

Preliminary data from the 1982 census have been issued in 27 industry reports and 1 summary report. These reports are superseded by more detailed, final reports.

Final Reports

Final detailed statistics are issued in separate paperbound reports.

Industry series—28 reports (CC82-I-1 to -28)

Industry series—27 reports (CC82-I-1 to -27). These reports present data for establishments with payroll and are published for each of the 27 industries included in the census. Each industry report presents 1982 data by State and for the United States on number of construction establishments; receipts; employment; hours worked; payrolls; payments to subcontractors; payments for materials, components, and supplies; payments for power and fuels; payments for selected purchased services; payments for the rental of machinery, equipment, and structures; value added; capital expenditures during the year; and depreciable assets. Limited data for 1977, 1972, and 1967 are also shown. In addition, more detailed data are shown at the U.S. level on construction receipts by type of structure (single-family houses, streets, roads, etc.). Selected data also are provided for establishments classified by their employment size and receipts size.

U.S. Summary—1 report (CC82-I-28). This report summarizes the data for establishments with payroll presented in the 27 individual industry reports and presents limited data for establishments with no payroll.

Geographic area series—10 reports (CC82-A-1 to -10)

Division reports (CC82-A-1 to -9). These reports are published for States grouped according to the nine census geographic divisions. Much of the geographic area series data are the same as presented in the

industry series, except here they are organized by State rather than by industry. Similar data also are presented for selected SMSA's. Data are provided for establishments classified by their employment size and receipts size. Data for establishments with no payroll as well as comparative 1977, 1972, and 1967 figures, on a limited basis, also are shown.

U.S. Summary by State (CC82-A-10). This report summarizes the data, as presented in the nine individual geographic division reports, for establishments with and without payroll.

Special series—1 report (CC82-SP-1)

Legal form of organization and type of operation (CC82-SP-1)—This report presents limited data (number of establishments, number of proprietors and working partners, total employment, and total receipts) for construction establishments without payroll, for construction establishments with payroll, and for the aggregate, classified by industry and by legal form of organization. It also contains selected statistics (number of establishments, employment, payrolls, receipts, payments to subcontractors, net construction receipts, and value added) for construction establishments with payroll, classified by industry and by type of operation (multiunit or single-unit) and by legal form of organization.

Final Report Volume

Final paperbound reports subsequently are assembled and reissued in one clothbound volume.

Microfiche

All published data also are available on microfiche.

OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, manufactures, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U.S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

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